## THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HOWARD R. LUCAS, ROBERT G. LEES,
 HERBERT BURKHARD and DAVID A. LEY

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Appeal No. 95-1146 Application No.  $07/913,126^{1}$ 

ON BRIEF

Before KIMLIN, WEIFFENBACH and PAK, <u>Administrative Patent</u> <u>Judges</u>.

KIMLIN, Administrative Patent Judge.

## DECISION ON APPEAL

<sup>&</sup>lt;sup>1</sup> Application for patent filed July 13, 1992. According to appellants, this application is a continuation of Application

No. 07/473,134, filed January 30, 1990, now abandoned; which is a continuation of Application No. 07/044,165, filed April 30, 1987; now abandoned.

This is an appeal from the final rejection of claims 2, 16 and 18. Claim 17, the other claim remaining in the present application, has been withdrawn from consideration as being directed to a non-elected species. Claim 16 is illustrative:

- 16. A curable latex composition comprising an emulsion in an aqueous medium of:
  - (i) (a) a polymer containing poly  $(C_1-C_6)$  alkylacrylamido-glycolate) functionality and
    - (b) a polymer or compound containing poly (active hydrogen) functionality or
  - (ii) a copolymer containing poly (C<sub>1</sub>-C<sub>6</sub> alkylacrylamidoglycolate) functionality and poly (active hydrogen) functionality, said polymers (i) or (ii) comprising from about 1 to about 40 weight percent of said C<sub>1</sub>-C<sub>6</sub> alkylacrylamidoglycolate functional units, with the proviso that said active hydrogen functionality is not provided by an amine.

In the rejection of the appealed claims, the examiner relies upon the following references:

Cady et al. (Cady)	4,454,301	June 12, 1984
Schirmann et al. (Schirmann)	4,778,869	Oct. 18, 1988
Schirmann et al. (EPO '000) (European patent application)	0 020 000	Dec. 10, 1980

Appellants' claimed invention is directed to a curable, aqueous emulsion of a copolymer containing poly  $(C_1-C_6)$  alkylacrylamidoglycolate) functionality and poly (active hydrogen) functionality. The appealed claims contain the

proviso that the active hydrogen functionality is not provided by an amine. According to page 2 of the specification, amine crosslinked coatings tend to be susceptible to yellowing or acid spotting. In addition, amines are costly and toxic.

Appealed claims 2, 16 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cady alone, or in combination with EPO '000. In addition, the appealed claims stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 6-8 of U.S. Patent No. 4,778,869.

Upon careful consideration of the opposing arguments presented on appeal, we find that the prior art applied by the examiner fails to establish a <u>prima facie</u> case of obviousness for the claimed subject matter. Accordingly, we will not sustain the examiner's § 103 rejections. Also, we will not sustain the examiner's rejection under the judicially created doctrine of obviousness-type double patenting.

We consider first the rejection of the appealed claims under § 103 over Cady alone or in combination with EPO '000. In essence, considering Cady alone, we do not agree with the examiner that the alkylacrylamidoglycolate alkyl ether and

acrylamidoglycoamide alkyl ether of Cady are chemical homologs of appellants'  $C_1$ - $C_6$  alkylacrylamidoglycolate. In the examiner's view, the only distinction between the polymers of Cady and the claimed polymers is that where appellants' polymers have a hydrogen substituent the polymers of Cady have an alkyl group of 1-6 carbon atoms, which include a methyl substituent. According to the examiner, the methyl substituent is the next higher homolog of appellants' hydrogen substituent. However, as explained by appellants, the difference between a methyl and hydrogen substituent at the relevant position is the difference between an ether and hydroxyl functional group which, manifestly, is significantly different. Accordingly, we agree with appellants that Cady, alone, provides no teaching or suggestion of the claimed polymers having the recited hydroxyl substituent.

Concerning the rejection over Cady in view of EPO '000, we agree with the examiner that the European patent would have suggested modifying the polymer of Cady to have a hydroxy substituent rather than an ether substituent. However, as pointed out by appellants, the European reference discloses that the polymerization must take place in the presence of an

amine curing agent. EXAMPLE 14 of the European reference discloses that no curing was effected in the absence of an amine. Accordingly, the collective teachings of Cady and the European patent would have suggested that when the ether substituent of Cady is replaced with a hydroxyl substituent, an amine curing agent must be employed. Since the appealed claims define a copolymer with hydroxyl, not ether, functionality having no amine functionality, we agree with appellants that the collective teachings of Cady and the European patent would not have rendered obvious the claimed copolymer.

Although we agree with appellants that the applied prior art does not establish a <u>prima facie</u> case of obviousness for the claimed subject matter, we do not subscribe to several of appellants' arguments. For one, inasmuch as appellants' specification attaches no particular criticality to the use of water or inorganic solvent as the solvent medium (see specification, page 5, lines 14-17), we find that it would have been obvious for one of ordinary skill in the art to utilize an aqueous medium in the polymeric coating compositions of the applied references. Also, we find little

merit in appellants' argument that Cady "indicates that the polymers of Cady did not fully cure unless a baked temperature of at least 150EC was employed" (page 9 of Brief). Cady discloses "[t]he composition of the present invention is readily cured as a coating by exposure to a temperature of about 100EC or higher for adequate time periods, usually at least about 20 minutes" (column 3, lines 27-30). disclosure fairly corresponds to appellants' specification disclosure that "[t]he new and improved low or room temperature curable compositions of the present invention cure to form hardened acid resistant materials at room temperature generally in a period of seven days or less, or at low temperatures with heating up to temperatures of 150EC in less than about 30 minutes" (specification, page 10, lines 9-14). Also, we find general correspondence between the results of the 200+ MEK rub test disclosed by Cady and the present specification.

We also do not find merit in appellants' argument that Cady does not "disclose that the active hydrogen functionality is not provided by an amine" (page 12 of Brief). Cady expressly

teaches that curing may be accelerated, optionally, by the inclusion of

p-toluene-sulfonic acid. Most of Cady's examples utilize p-toluene-sulfonic acid, not an amine, and Cady discloses a variety of ways of obtaining hydroxy functionality other than the inclusion of an amine (column 2, lines 41 et seq.).

We also do not find that TABLE 4 of appellants' specification is evidence of nonobviousness, since the data is not germane to the claimed subject matter. The compositions set forth in TABLE 4 are <u>solvent-borne</u> compositions, whereas the claimed composition is in an aqueous medium.

We will not sustain the obviousness-type double patenting rejection over U.S. Patent No. 4,778,869 because the claims of the patent are directed to a copolymer containing ether functionality, not the claimed hydroxy functionality. Also, the patented claims are directed to a polymer containing active hydrogen functionality provided by an amine, which is excluded by the appealed claims.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

## REVERSED

Appeal No. 95-1146 Application No. 07/913,126

EDWARD C. KIMLIN		)	
Administrative Patent	Judge	)	
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CAMERON WEIFFENBACH		)	BOARD OF PATENT
Administrative Patent	Judge	)	APPEALS AND
		)	INTERFERENCES
		)	
		)	
CHUNG K. PAK		)	
Administrative Patent	Judge	)	

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William H. Calnan American Cyanamid Co. 1937 West Main St. P.O. Box 60 Stamford, CT 06904-0060